

IN THE SPECIFICATION

Please amend the Field of the Invention, as follows:

At page 2, par.1:

Field of the Invention

The invention generally relates to food processing equipment, such as an electrical beverage brewer, such as a coffee or tea brewer, and, more particularly, to ~~an~~ such a food processing equipment with a plurality of manually operable function control switches for controlling the operations of the food processing apparatus.

Please amend the SUMMARY OF THE INVENTION, as follows:

Starting at page 3:

SUMMARY OF THE INVENTION

It is therefore a principal object of the present invention to provide a beverage brewer with an operator control panel and a brewer controller ~~and method of control~~ that overcomes the disadvantages of known beverage brewers in which relatively permanently nonoperational brewer function selection switches, or temporarily disabled brewer function switches, or the locations of such switches, are always visible.

This objective is achieved in part by providing in a food processing apparatus for performing a plurality of processes on a food ingredient with a directive manual control system having a plurality of hidden function selection switches associated with a plurality of different operator selectable food processing functions, a housing with a partially translucent, protective, operator control panel having an interior side covering the plurality of switches and through which the hidden function switches cannot be seen under ordinary ambient light conditions, and an exterior side for manual engagement by an operator, a plurality of lights each associated with at least one of each of the hidden function switches and located at the interior side of the panel, and a controller with means for selecting ones of the hidden function switches to be revealed to an operator in accordance with a computer program stored in the controller, means for energizing only the lights associated with the hidden function selection switches selected to be revealed to illuminate portions of the interior side partially translucent panel adjacent the selected function switches, said illumination of the interior side of the panel being visible through

the translucent panel to indicate at the exterior of the panel the location of the selected one of the function switches.

In the preferred embodiment, the food processing apparatus includes means associated with the controller for preselecting different modes of operation in which different ones of the function switches are not to be used and means for relatively permanently disabling the different ones of the function switches not to be used while the associated mode of operation remains preselected. Also, preferably, the controller, when in the preselected different modes of operation, relatively temporarily disables different ones of the function switches that are not relatively permanently disabled in response to changing conditions of the apparatus. The different modes of operation may include one of different modes of operation of (a) a coffee brewer, (b) a hot tea brewer, (c) a fresh iced tea brewer, (d) a hot water heater and dispenser and (e) a food grinder.

~~Similarly, the objective is achieved by providing a directive manual control method for use in a food processing apparatus for performing a plurality of processes on a food ingredient by performing the steps of covering a plurality of manually operable function switches with a partially translucent, protective, operator control panel forming part of a housing and having an interior side through which the hidden function switches cannot be seen under ordinary ambient light conditions and an exterior side for manual engagement by an operator, associating a plurality of lights with at least one of each of the hidden function switches and located at the interior side of the panel, selecting with a controller ones of the hidden function switches to be revealed to an operator in accordance with a computer program stored in the controller, energizing only the lights associated with the hidden function selection switches selected to be revealed to illuminate portions of the interior side partially translucent panel adjacent the selected function switches, and passing light from the illumination to the exterior of the panel said illumination of to illuminate and thereby indicate at the exterior of the panel the location the one of the function switches selected to be revealed.~~

~~Preferably, the method includes the steps of preselecting with means associated with the controller different modes of operation in which different ones of the function switches are not to be used, and relatively permanently disabling the different ones of the~~

~~function switches not to be used while the associated mode of operation remains preselected.~~

~~Also, the method preferably includes the step of relatively temporarily disabling with the controller, when in the preselected different modes of operation, different ones of the function switches that are not relatively permanently disabled in response to changing conditions of the apparatus.~~

The objective is also obtained by provision of a beverage brewer having an operator control panel with a plurality of hidden function selection switches respectively associated with a plurality of different operator selectable brewer functions, means for preselecting different modes of operation, and a controller with means for selectively revealing only preselected ones of the hidden function switches to an operator in accordance with the different preselected modes of operation.

In the preferred embodiment, some of the plurality of different operator selectable brewer functions include a function of starting brew cycles for making different quantities of beverage, and the different preselected modes of operation are respectively associated with making the different quantities of beverage. The control panel may have other hidden switches associated with other functions, and the controller has means for selectively revealing the other hidden switches regardless of the different preselected modes operation. In addition, the control panel has a hidden message display, and the controller includes means for selectively revealing at least a portion of the hidden message display. Preferably, the operator control panel includes at least another hidden function selection switch associated with at least another brewer function that is independent of the different modes of operation, and the controller includes means for selectively revealing the at least another hidden function switch in response to a change in operating conditions of the brewer.

In one embodiment, the plurality of hidden function switches are respectively associated with start a plurality of different brew cycles associated with a plurality of different quantities of beverage to be brewed and the controller includes means for selectively revealing only the preselected ones of the hidden function switches when a brew cycle is not already in progress.

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The control panel is preferably a partially translucent panel through which the hidden function switches cannot be seen under ordinary ambient light conditions behind which the hidden function switches are located, and the selectively revealing means includes a plurality of lights each associated with at least one of each of the hidden function switches, and means for selectively energizing the lights associated with the hidden function switches selected to be revealed to light portions of the partially translucent panel adjacent the selected function switches. The lights are visible through the translucent panel to indicate the location of the switches selected to be revealed.

The object of the invention is also acquired by provision of a beverage brewer, with an operator control panel having a plurality of hidden function selection switches respectively associated with a plurality of different operator selectable brewer functions, and a controller with means for selectively revealing only selected ones of the hidden function switches to an operator in accordance with different phases of operation of the brewer.

~~The invention thus also provides, for use in a beverage brewer, an auto-directive method of control by performance of the steps of hiding at a control panel a plurality of hidden function selection switches respectively associated with a plurality of different operator selectable brewer functions, preselecting different modes of operation, and selectively revealing only preselected ones of the hidden function switches to an operator in accordance with the mode of operation that has been preselected. Preferably, some of the plurality of different operator selectable brewer functions include the function of starting brew cycles for making different quantities of beverage, and the different preselected modes of operation are respectively associated with making the different quantities of beverage. The method may also include the steps of hiding other brewer function switches associated with other functions, and selectively revealing the other hidden switches regardless of the different preselected modes operation. With regard to the message display, the method may include the steps of hiding the message display, and selectively revealing the message display when needed for display of a message.~~

~~Preferably, the control method also includes the steps of associating another brew function with another selection switch that is independent of the different modes of~~

operation, and selectively revealing the at least another hidden function switch in response to a change in operating conditions of the brewer.

—— The objective of the invention is also obtained in part by provision, for use in a beverage brewer, of an auto-directive control method achieved through performance of the steps of associating a plurality of hidden function selection switches of an operator control panel with a plurality of different operator-selectable brewer functions, and selectively revealing through means of a controller only selected ones of the hidden function switches to an operator in accordance with different phases of operation of the brewer. In one embodiment, some of the plurality of different operator-selectable brewer functions include one or more of the functions of (a) starting different brew cycles for making different quantities of beverage, (b) a brewer power-on function, (b) a stop brew cycle function, and (c) a water dispense function and (d) a start brew function.

In accordance with one aspect of the invention, one of a plurality of different modes of brewing operation is preselected, and the hidden function selection switches that are not associated with any functions performed during the mode of brewing operation that have been selected are relatively permanently disabled. Also, the selectively revealing means is relatively permanently disabled from revealing the relatively permanently disabled function switches that are not associated with any functions of the preselected mode of operation. Preferably, the method includes the step of selectively enabling all of the function switches that have not been disabled due to the preselected mode to be selectively revealed in accordance with changing status of the brewer during normal operation in the preselected mode of brewing.

—— If the operator control panel has a message display for displaying information needed for programming the controller, then the method may include the steps of hiding the message display, and selectively revealing the message display when needed for programming. Preferably, the message display is only revealed when there is a message to be displayed.

In accordance with another aspect of the invention, a demonstration mode is provided in which the lighting of the different switches is demonstrated while the actual opening and closing of valves and the heating of the hot water is inhibited to facilitate training of new operators without risk of inappropriate entries and without the necessity

of actually performing brew cycles. In this mode of operation, the energization of the heating element is inhibited and opening of the various brew valves in response to actuation of the control switches or otherwise in accordance with the operating program is inhibited. Otherwise, in the demonstration mode, the brewer operates in accordance with the normal operating software.

The objective of the invention is also achieved by provision of a self-diagnostic software that, when errors are discovered, lights the message display to reveal an error message but which otherwise leave the message display unlighted to hide the message display when there is no message to be displayed.

In accordance with another object of the invention, Braille code or other tactile-readable code is provided by embossments that are raised above the exterior surface of the panel and adjacent to, or directly atop, each of the switch locations. In the preferred embodiment, these embossments are given the same color as the contiguous portions of the panel to reduce their visibility so as not to patently, visually, mark the location of any switches that has not be selected to be revealed. In one embodiment, the embossments may be provided on a changeable tactile board so that only tactile codes are provided in association with the switches selected to be revealed or which are enabled for use.

Please amend the DETAILED DESCRIPTION, as follows:

At page 15, Referring now to Fig. 11C, in accordance with the invention, when any of the brewer function switches are disabled from performing their function, either because of the temporary operating status of the brewer 20 or because of a mode of operation has been preselected in which certain functions associated with the function selection switch are not allowed, then those brewer function switches and their associated hidden icons remain hidden and are not revealed by energizing their associated lamp 84. Thus, for example, referring to ~~Fig. 11C~~FIG. 1, when there is no brew cycle in process on the right side brewer, the right stop switch 42 has no function to perform and is disabled. Accordingly, as shown, the hidden stop icon 126 is not backlit by the associated lamp 84 and remains hidden to the operator.

At page 28, par. 1:

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Re-load Defaults